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ABSTRACT

The 195 audiovisual aids listed in this annotated bibliography aim toward introducing students of library science to the rapidly evolving theory and technology of information science. Each item lists the title, length of film in minutes, a brief description of the content, and the current availability. A subject index is provided. (The first edition is available as ED 051 819.) (HM/SJ)

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AUDIOVISUAL MATERIALS IN SUPPORT OF INFORMATION SCIENCE CURRICULA:

AN ANNOTATED LISTING WITH SUBJECT INDEX

by

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School of Library and Information Science
State University of New York at Albany

First Edition, Revised
May 1972

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Stanford, California 94305

and the

Special Interest Group on Education for Information Science (SIG/ES) of the American Society for Information Science

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AUDIOVISUAL MATERIALS IN SUPPORT OF INFORMATION SCIENCE CURRICULA: AN ANNOTATED LISTING WITH SUBJECT INDEX won the 1971 American Society for Information Science (ASIS) Award for "Best Publication by ASIS Chapter or Special Interest Group."

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FOREWORD

In seeking to introduce students of library science to the rapidly evolving theory and technology of information science, an urgent need became apparent for audiovisual aids which could be utilized in support of an instructional program for the newly-emerging discipline. Regretfully, the abstracting and indexing services useful for retrieving the traditional literature forms relating to library and information science were almost useless for audiovisual documents. A large variety of published and unpublished sources thus had to be consulted in order to arrive at the present compilation which, of necessity, must be considered a preliminary one.

While an effort was made to acquire and view all of the audiovisuals included in this compilation, because of previous bookings or inordinate expense not all of the items were obtained. In all instances, however, the correctness of description, address and current availability from at least one source was ascertained by means of a questionnaire. Following each entry (in parentheses), the producer or purchase source is given. The compiler welcomes suggestions of new items for inclusion in a revised future edition of this publication and solicits your critical evaluations of the items listed.

Thanks are due to William G. Crawshaw, my research assistant, for his aid in searching industrial and institutional film catalogs, and to Mrs. Ethel Widdowfield for typing and proofreading the manuscript.

I.M. Klempner
May 1, 1972

PREFACE

To say that education for information science has its problems, and needs all the help it can get, is an understatement.

In the United States and Canada alone, there are some 100 educational institutions, schools and departments, and some 700 faculty members, involved in teaching some aspect of information science, whose interpretations of the subject matter of "information science" and intensity of involvement with information science differ widely. The institutions have dissimilar orientations, curricular structures, and names, and so do the courses.

There are a number of professional associations with a stated interest in education for information science, but their viewpoints, aspirations and efforts differ widely.

The literature related to information science is as disparate as are the varied interpretations and orientations. In the field of information science, there are theoretical and experimental orientations, practical and technological orientations, social and psychological orientations, as well as philosophical orientations. Institutions, associations and the literature are directed either toward a single orientation or toward some combination of these orientations.

In addition to these conceptual problems, there are other problems more immediately related to instruction, problems with which the teachers of information science have to struggle on a day-to-day basis. One of these is the problem of aids for use in instruction. Audiovisual materials are one of the aids which greatly enhance and reinforce the learning process and often, as a side benefit, enliven the whole education process.

Audiovisual aids have a yet unrealized potential in education for information science. Thus far, these aids have been relatively unknown, and that has presented a great problem in identifying their availability to anybody wanting to utilize them. We are, therefore, greatly indebted to Professor Klempner for calling our attention to the existence and availability of these potentially very useful resources. Teaching, explaining, and promoting information science will be made easier with the help of bibliographies such as his.

The Special Interest Group for Education in Information Science (SIG/ES) of the American Society for Information Science (ASIS) has as its purpose to provide a framework "within which those that have an interest in education for information science may share their professional activities and studies ... (and) to collect and disseminate information concerning education in this field ..."

By sponsoring this publication, in cooperation with the ERIC Clearinghouse on Library and Information Sciences and the ERIC Clearinghouse on Media and Technology, we believe that we are performing a useful and needed service not only to the members of SIG/ES and to the members of ASIS, but to all those interested directly, or indirectly, in teaching and promoting information science.

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Case Western Reserve University
Cleveland, Ohio

Tefko Saracevic
Chairman, SIG/ES,
American Society for Information Science

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001C The Accounting Machine (24 minutes, 16mm, black and white, 1971)
Presents the functional components of the machine. Shows how card volume can be reduced for a cumulative report by the summary punching capability. (The Wiley Punched Card Data Processing Film Series)
Available from John Wiley & Sons, Inc., 605 Third Avenue, New York, N.Y. 10016.

001L All About ERIC (68 35mm slide or filmstrip format and 12 minute tape, color, 1971)
An audiovisual presentation for introducing the scope and functions of the Educational Resources Information Center, U.S. Office of Education. (Photo Laboratory, Inc.)
Available from Photo Laboratory, Inc., 3825 Georgia Avenue, N.W., Washington, D.C. 20011.

001P Alphabet (29 minutes, 16mm, kinescope)
Analyzes the English writing system and traces the origin, development, and spread of the alphabet. Shows and explains various writing systems including Sanskrit, Chinese, and Arabic. Discusses the significance of hieroglyphics in the development of written language. With Dr. Henry Lee Smith, Jr., Professor of Linguistics and English, State University of New York at Buffalo. (Language and Linguistics Series) (NET Film Service)
Available from University of California Extension Media Center, 2223 Fulton Street, Berkeley, Ca. 94720.

001W Automation -- The Next Revolution (28 minutes, 16mm, black and white)
Pinpoints the social and economic problems of automation and the need for massive effort to create jobs and overcome these problems. Workers, labor leaders, and industrialists discuss today's economic progress. Students see automation revealed as the dominant factor in the new industrial revolution. (McGraw-Hill)
Available from McGraw-Hill Textfilms, 1121 Avenue of the Americas, New York, N.Y. 10020.

002 Base and Place (30 minutes, 16mm, black and white)
Presents the characteristics, history, and applications of the binary system and emphasizes the basic principles of base and place in our system of numeration. Indicates how numbers are represented in the binary system and the relationship to electronic digital computers. (Understanding Numbers Series) (University of Michigan) (NET Film Service)
Available from University of California Extension Media Center, 2223 Fulton Street, Berkeley, Ca. 94720.

003 The Better Way (15 minutes, 16mm, color)
A description of the procedures employed in the reproduction of engineering drawings through the application of micro and xerography. Provides a detailed explanation of the use of the Xerox 1824 printer. (Xerox Corporation)
Available from Xerox Corporation, Audiovisual Services, Xerox Square, Rochester, N.Y. 14603.

004 Better World (8 minutes, 16mm, color, 1967)
Describes the influence of computers on everyday activities, including education, medicine, traffic control on the ground and in the air, space research, law enforcement, and general business community. (Produced by IBM World Trade Corporation)
Available from Film Enterprises, Inc., 485 Fifth Avenue, New York, N.Y. 10017.

005 Book (18 minutes, 16mm, black and white, 1955)
Swedish film production gives a graphic and imaginative survey of publishing in all its phases, including the mechanics of printing books, as well as the responsibilities and contributions of author and publisher. (Encyclopaedia Britannica Educational Films)
Available from Encyclopaedia Britannica Educational Corp., 425 North Michigan Avenue, Chicago, Ill. 60611.

006 Books on Trial (29 minutes, 16mm, black and white, 1961)
Explores the issue of literary censorship and utilizes the pro and con opinions of local leaders, following attempts to ban Henry Miller's controversial book, TROPIC OF CANCER, from the shelves of the Free Library of Philadelphia. (WCAU-TV)
Available from WCAU-TV, Department of Public Affairs, City and Monument Avenues, Philadelphia, Pa. 19131.

007 Business Filing (6 filmstrips/3 records or 6 cassettes)
Compares and contrasts various kinds of filing systems and presents the basic principles of alphabetizing, coding, the use of guides and several methods of control. Modern filing equipment, data processing, and microfilming techniques are shown. (Coronet Films)
Available from Coronet Films, 65 E. South Water Street, Chicago, Ill. 60601.

008 By the Numbers (16 minutes, 16mm, color, 1962)
An explanation of how visual images are changed into numbers so that they can be interpreted and manipulated by computers. Illustrates conversion of aerial photo-

graph to computer-produced map and points to other applications. (IBM)

Available from University of Michigan, Audio-Visual Education Center, 416 Fourth Street, Ann Arbor, Mich. 48103.

008R The Card Punch (20 minutes, 16mm, black and white, 1971)

Illustrates the basic purpose of the card punch, discusses functional components, control switches, keys, and provides a review of the Hollerith coding system. (The Wiley Punched Card Data Processing Film Series)

Available from John Wiley & Sons, Inc., 605 Third Avenue, New York, N.Y. 10016.

009 The Catalyst (13 minutes, 16mm, color, 1970)

Depicts UNIVAC's real-time capabilities. The catalyst is the computer. Applications in the film include Apollo, anti-submarine warfare, air traffic control, global weather forecasting, medical research and education. (AVU 4738) (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

011 Century 21 (17 minutes, 16mm, color)

An animated film which describes Xerography and suggests applications to the art of graphic communications both now and in the future. Produced for use by the American Library Association at their exhibit at the Seattle World's Fair.

Available from Xerox Corporation, Audio-visual Services, Xerox Square, Rochester, N.Y. 14603.

012 Challenge of Change (20 minutes, 16mm, color, 1966)

Describes present day information explosion, shows how librarians are storing information for reference, and points out the need for trained librarians to meet the challenge of the era of change. (Prepared by William W. Matthews & Co., with the cooperation of Pennsylvania State Library and University of Pittsburgh.) Available from N. Y. State Library, Auxiliary Services Section, 226 Elm St., Albany, N. Y. 12224.

012R The Collator (31 minutes, 16mm, black and white, 1971)

Discusses the collator's merging, matching, match-merging, selecting, and sequence-checking capabilities. Functional components and operating features are demonstrated and explained. (The Wiley Punched Card Processing Film Series)

Available from John Wiley & Sons, Inc., 605 Third Avenue, New York, N.Y. 10016.

013 Command and Control (8 minutes, 16mm, color, 1965)

When manual retrieval systems could not keep up with the information needs of the Air Force, data processing techniques were developed. This film shows how command and control can be much more responsive with these new automated retrieval systems. (U.S. Air Force) (Order No. SFP 1345)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

014 Communication Revolution (21 minutes, 16mm, black and white, 1967)

Discusses the impact of the information explosion and mass media of communication on Western civilization. Questions a new distribution of power through a redistribution of information and the inevitable need for discrimination in teaching media. (Ohio State University Motion Picture Division)

Available from Ohio State University, Department of Photography, Film Library, 156 W. 19th Street, Columbus, O. 43216.

015 Communication Theory (28 minutes, 16mm, black and white, 1964)

Describes a simple computer system by showing how a dot may be used to represent letters and sound and to form pictures and codes. (Prism Productions, 220 East 23rd Street, New York, N.Y.)

Available from Modern Learning Aids, 1212 Avenue of the Americas, New York, N.Y. 10036.

016 The Communications Explosion (25 minutes, 16mm, color, 1967)

An exploration of technological developments in the field of communications. Shows how computers, lasers, and orbiting satellites may be the departure points for worldwide communication at all levels. The potentials of 3-D TV are examined and the concept of the "global village" is discussed. Produced by CBS News for the "21st Century" series. (McGraw-Hill)

Available from State University Film Service, 1400 Washington Avenue, Albany, N.Y. 12203.

017 A Communications Primer (22 minutes, 16mm, color, 1954)

Defines communications as that which keeps a society or organization together. Gives an explanation of communication in its broadest concepts. Through animation and normal photography, the film shows that all communication goes through a transmitter, a channel, then a receiver. This communication can be a painting, a word, a note of music, a hand signal, or any type of message. (Charles and Ray Eames, 901 Washington Boulevard, Venice, Ca. 90291)

Available from State University Film Service, 1400 Washington Avenue, Albany, N.Y. 12203.

017C The Communications Revolution (197 minutes, 16mm, black and white)

Features a panel of specialists in the field of communication describing the impact of the mass media upon literature, traditional theories of education, and on society. Notes basic characteristics of some of the newer forms of communication, the result of older forms of communication being put to newer uses in newer form and advantages and disadvantages of a number of newer forms. (Ohio State University Motion Picture Division)

Available from Ohio State University,

Department of Photography, Film Library, 156 W. 19th Street, Columbus, O. 43216.

018 A Computer Glossary (14 minutes, 16mm, color, 1968)
Using animation, pictures, and narrative, this film depicts a "fantastic voyage" into the complex micro-circuitry of a computer. The film also defines in basic terms the vocabulary of computers, including terms such as flowchart, Boolean logic, nanosecond and simulation, and gives the viewer an enlarged understanding of electronic data processing. (IBM)
Available from IBM Motion Picture Library, Modern Talking Picture Service, 1212 Avenue of the Americas, New York, N.Y. 10036.

019 Computer Revolution (24 minutes, 16mm, color, 1968)
A general introduction to the computer, emphasizing its present uses and its potential for the future. Shows how coded information is stored, organized, and processed in accordance with programmed instructions and the computer's capability to produce output in desired format. (Columbia Broadcasting System)
Available from BFA Educational Media, 2211 Michigan Avenue, Santa Monica, Ca. 90404.

020 The Computer Story (24 minutes, 16mm, color, 1968)
Traces of the history of Autonetics as one of the foremost producers of computers for military applications through 1968. Advanced microelectronics and solid state technologies are featured. (Autonetic Division, North American Rockwell Corporation)
Available from North American Rockwell Corporation, Public Relations Dept., 3370 Miraloma Avenue, Anaheim, Ca. 92803.

021 The Computer Tutor (20 minutes, 16mm, color)
Description of the Electronic Retina Computing Reader, a large-scale optical character recognition system, and some of its current applications. (Recognition Equipment Incorporated)
Available from Recognition Equipment Incorporated, Corporate Communications, P.O. Box 22307, Dallas, Tex. 75222.

022 Computers at Work (12 minutes, 16mm, color)
Visualizes the computer becoming as readily accessible as the telephone. Shows a variety of computer applications in industry and educational institutions. (General Electric Company)
Available from General Electric Educational Films, 60 Washington Avenue, Schenectady, N.Y. 12305.

022W The Control Program of IBM Operating System/360 (60 minutes, 16mm, black and white, 1964)
Informs the viewer of the concept of the control program and explains the advantages of an operating system in terms of throughput turnaround, user services and the relationship with other members of the operating system/360, such as language processors, user programs, etc. Design characteristics for accommodating modular system design and system growth are discussed. (Precision Film Laboratories)
Available from IBM office in your area.

023 Control Revolution (30 minutes, 16mm, black and white, 1962)
The development of the computer has made possible the automatic control of routine tasks and decision-making related to the recording, storing, and processing of data. (NET-Indiana University) (Computer and the Mind of Man Series) KQED Film.
Available from Syracuse University, Film Rental Library, 1455 East Colvin Street, Syracuse, N.Y. 13210.

024 Corporate Technical Information Center (10 minutes, 16mm, color, 1962)
Illustrates the problems confronting a reference librarian seeking to satisfy a user's demand for a specific document when only minimum identification is provided. The use of an optical coincidence method (Termatrex) is demonstrated as the means of organizing and retrieving information in a corporate technical information center. (Production number M-389-384)
Available from Aerojet Electrosystems, P.O. Box 296, Azusa, Ca. 91702, Attention: Corporate Librarian.

025 COSATI Inventory 2 (27 minutes, 16mm, color, 1969)
Prepared by Battelle for a COSATI panel. Demonstrates on-line searching systems of System Development Corporation, Data Corporation, Computer Corporation of America, Lockheed (DIALOG), and Computer Communications, Inc.
Available from Battelle Memorial Institute, Information Research Center, 505 King Avenue, Columbus, O. 43201.

026 DAC-1 (13 minutes, 16mm, color, 1965)
This computer system, developed by GM Research Laboratories, aids designers to write and draw. With more flexible communication between man and computer, the designer can feed an idea into the computer which is programmed to fill in the details and to translate the idea into an engineering visual on a video screen. The designer can instruct the computer to make modifications or refinements. When the idea is finalized the computer can print out a finished copy of the engineering drawing. (General Motors Corporation)
Available from General Motors Corporation, Public Relations Staff Film Library, General Motors Building, Detroit, Mich. 48202.

027-030 Data and Decision Series (a series of filmstrips dealing with computers and automation)
027 Electronic Frontier (71 frames, color, sound)
028 Computer Systems (92 frames, color, sound)

029 Feasibility Study (84 frames, color, sound)
030 Data Processing (68 frames, color, sound)

027-030 available from Wayne State University, System Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 48202.

031 Defense Documentation Center (15 minutes, 16mm, color)

A description of the functions, services, and information processing procedures of the Defense Documentation Center.

Available from Defense Documentation Center, Cameron Station, Alexandria, Va. 22314.

031R Dial Access Information Retrieval Systems (filmstrip, sound, color, 32 frames)

Provides a description of a Dial Access IR System.

Available from Educational Media, Inc., 106 West 4th Avenue, Ellensburg, Wash. 98926.

032 Digital Computer Programming, Introduction to Pint for the PRC-4000 (51 minutes, 16mm, black and white, 1961)

Shows how to program information for computer use. Discusses computer language and considers how the computer makes use of machine-readable data bases. (Purdue University)

Available from Purdue University, Audiovisual Center, Lafayette, Ind. 47907.

033 Digital Computer Technique: Computer Logic (13 minutes, 16mm, color, 1962)

Explains by means of animation the binary number system, defines the several meanings of logic as applied to computers, shows the difference between the decimal and binary number systems, explains how binary numbers are constructed and how arithmetical operations are performed with them. Cites examples of code variations of the binary system. (Order No. MN 8969B, USN)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

034 Digital Computer Technique: Introduction (16 minutes, 16mm, color, 1962)

Provides a general introduction to digital computers, explains the historical origins of calculating devices, points out the differences between analog and digital computers, discusses the principal steps involved in the solution of problems subjected to the digital computing process. (Order No. MN 8969A, USN)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

035 Digital Computer Techniques: Computer Logic Symbology (15 minutes, 16mm, color, 1962)

Shows the basic U.S. Military standard symbols of the logic elements of computers as an introduction to digital computer logic symbology, shows their function in electronic signals. (Order No. MN 8969C, USN)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

036 Digital Computer Techniques: Computer Units (24 minutes, 16mm, color, 1962)

Discusses in an introductory way the major units of a digital computer: input, output, arithmetic, and control. (Order No. MN 8969D, USN)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

037 Digital Computer Techniques: Logic Element Circuits (16 minutes, 16mm, color, 1962)

Illustrates how solid state electronics are used in modern computers. (Order No. MN 8969E, USN)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

038 Digital Computer Techniques: Programming (14 minutes, 16mm, color, 1962)

Defines computer programming, explains what is meant by analyzing the problem, shows how a simple flow chart is prepared with symbols and gives their meaning, and shows how instructions to the computer are encoded in computer language. (Order No. MN 8969F, USN)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

039 Digital Computers: Introduction (24 minutes, 16mm, color)

Reveals the "what, how, and why" of digital computing. Features magnetic drums and cores, random access, solid state, real time operation, card-to-tape conversion and other characteristics. (Remington Rand)

Available from Syracuse University, Film Rental Library, 1455 East Colvin Street, Syracuse, N.Y. 13210.

040D Discs That Are a Cylinder (10 minutes, 16mm, color, 1961)

Explains the concept of IBM 1301 disc storage unit. (Precision Film Laboratories)

Available from IBM office in your area.

041 Education and the Computer (12 minutes, 16mm, color)

An introduction to the Dartmouth time-sharing system and to BASIC computer language. After explaining the organization and utilization of the computer at Dartmouth, the film shows examples of utilization in the areas of physics, classics, and medicine. Prof. John G. Kemeny (Math) talks about some wider applications of the computer in society.

Available from Dartmouth College Films, Fairbanks North Hall, Hanover, N.H. 03755.

041F Educational Information Network (30 minutes, 16mm, black and white, 1969)

A description of computer-program

sharing among universities belonging to EDUCOM.

Available from Dr. Jordan Baruch, 9650 Rockville Pike, Bethesda, Md. 20014.

042 Electronic Computers and Applied Mathematics (25 minutes, 16mm, black and white, 1961)

Describes the basic computer units of control, input, storage, processing, and output. Applications of a binary system are illustrated. Magnetic core, disc, and drum are explained. A number of uses of computers are shown. (Kenneth Clouse)

Available from University of California, Extension Media Center, 2223 Fulton Street, Berkeley, Ca. 94720.

042F The Electronic Retina Computing Reader (16mm, color)

Presents Optical Character Recognition (OCR) as the answer to the growing costs and problems of computer input. A basic understanding of the OCR technology is conveyed. Examples of OCR Systems which are proving this new technology are provided. (Recognition Equipment Incorporated)

Available from Recognition Equipment Incorporated, Corporate Communications, P.O. Box 22307, Dallas, Tex. 75222.

043 "ESS" -- A Manufacturing Report from the New World of Telephone Technology (26 minutes, 16mm, color, 1965)

Describes the application of advances in electronic engineering to the making of components for the Electronic Switching System. Shows the development of processes and tools, and the creation of controlled atmospheric environments necessary for their use. (Western Electric Company)

Available from Western Electric Motion Picture Bureau, Public Relations Division, 195 Broadway, New York, N.Y. 10007.

044 Facts About Film (13 minutes, 16mm, color, 1959)

Presents information on the various kinds of film, what film is, who uses film, how to maintain and repair films, and what causes film damage. Deals primarily with splicing, storing, and caring for 16mm sound film. (International Film Bureau)

Available from International Film Bureau, 332 South Michigan Avenue, Chicago, Ill. 60604.

045 Facts About Projection (17 minutes, 16mm, color, 1959)

Uses animation in the discussion of projection problems. Shows how the optical section projects moving pictures on the screen, and how the sound section reproduces electrical pulsations, amplifies them and activates the loud speakers. Discusses the care and maintenance of equipment, the arrangement of projector and screen for best results, the methods of light control, the need for stocking spare parts, and the essential need for preparation in advance of screening. (International Film Bureau)

Available from International Film Bureau, 332 South Michigan Avenue, Chicago, Ill. 60604.

046 File Organization Methods (19 minutes, 16mm, color)

Through the use of animation and narration, this film introduces the programmer or analyst to the techniques of data storage on direct access storage devices. Although the film is self-contained and can be used separately, it is a logical continuation of the subject matter of the film "Direct Access Storage."

Available from Computer Methods Corporation, The Educational Division, 470 Mamaroneck Avenue, White Plains, N.Y. 10605.

047 Filing Procedures in Business (2nd ed.) (14 minutes, 16mm, color and black and white, 1965)

Shows preparation of records for filing, the filing procedure, retrieval, and transfer to storage. Illustrates various types of files, such as numerical, geographical, and subject files. (Coronet Films)

Available from Coronet Films, 6[illegible] E. South Water St., Chicago, Ill. 60601.

048 Film Splicing with the Griswold and Harwald Splicers (8 minutes, 16mm, color and black and white, 1961)

Shows the correct methods for the splicing of 16mm film. The principal demonstration shows the removal of the emulsion and the cementing of the two film bases. The proper methods of keeping the splicer clean and in good condition are demonstrated. Of interest to anyone working with films. (Bailey Films Incorporated)

Available from BFA Educational Media, 2211 Michigan Avenue, Santa Monica, Ca. 90404.

048F Film Splicing with the Triad, B & H, and NPC Splicers (8 minutes, 16mm, color and black and white, 1961)

Uses animated diagrams to show the composition of 16mm sound film and the function of film cement. Demonstrates proper handling of film and use of a splicer. (Bailey Films Incorporated)

Available from BFA Educational Media, 2211 Michigan Avenue, Santa Monica, Ca. 90404.

049 The Flow Process Chart and How to Use It (15 minutes, 16mm, color, 1951)

Shows the use of a flow process chart in the study and application of work simplification, the meaning of the symbols used on such a chart, and the use of the chart in analyzing the relatively simple job of shaving. (U.S. Office of Scientific Research and Development, Department of the Army)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

050 Focus on a Century of Communications (28 minutes, 16mm, color, 1964)

A film about the charm, wisdom, and wit of the American Way of Life for the past 100 years -- presented in terms of people who communicated in different ways -- and the part played by paper in preserving the records of the past and of the present.

Includes many unpublished visuals -- engravings, paintings, photographs and historical motion pictures -- making this a fascinating document of the broad mosaic of a great American century.

Available from P.H. Glatfelter Co. Film Library, Department of Creativision Inc., 295 West 4th Street, New York, N.Y. 10014.

050K Frontiers in Computer Graphics (20 minutes, 16mm)

Highlights multiprogrammed operation of System/360 and customer-written 2250 programs from Douglas, Lockheed, UCLA and Beckman.

Available from IBM office in your area.

050L The 418 (6 minutes, 16mm, color, 1964)

Features the real-time and batch processing capabilities of the UNIVAC 418 System and provides details on equipment specifications. (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

050N The 1428 Alphameric Optical Reader (11 minutes, 16mm, color, 1962)

Describes the IBM principle of optical character reading and shows the sales advantages of the IBM 1428. Covers functions and use of the IBM 1428 in a clear, easy to understand manner. (IBM)

Available from IBM office in your area.

051 Fundamentals of the Nervous System (17 minutes, 16mm, color, 1962)

Illustrates the two major divisions of the nervous system and explains their functions. With live photography, photomicrography, animated drawings, and demonstrations, the film shows how the nervous system conveys external information from the sense organs to the brain, coordinates the information with present and past experience, and directs muscles and other organs to adaptive behavior. (Encyclopaedia Britannica Films)

Available from State University Film Service, 1400 Washington Avenue, Albany, N.Y. 12203.

052-060 Fundamentals of Thinking Series (filmstrip sound and color; each is 25 frames long, 1962)

A series of filmstrips based on the research of Dr. Louis E. Raths, New York University. The filmstrips are based on Dr. Raths' belief that the complex thinking process can be subdivided into nine separate, yet integrated, skills. Each of the nine basic thinking skills is presented in an individual filmstrip. (New York University)

- 052 Making Comparisons
- 053 Looking for Assumptions
- 054 Classifying
- 055 Critical Thinking
- 056 Problem Solving
- 057 Interpreting Fundamentals of Thinking Series
- 058 Summarizing
- 059 Observing Fundamentals of Thinking Series
- 060 Analyzing

052-060 available from Wayne State University, Systems Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 48202.

061 The Futurists (25 minutes, 16mm, color, 1967)

Interviews with twelve famous scientists, economists, educators, and writers on the importance of human responsibility in channeling knowledge toward the mental and physical welfare of all mankind. Interviews include zoologist Sir Peter Brian Medawar, architect-engineer R. Buckminster Fuller, sociologist Daniel Bell, science editor Walter Sullivan, economist Bertrand de Jouvenel, and physicist-inventor Dennis Gabor. Code 689316. (McGraw-Hill)

Available from McGraw-Hill Films, 1121 Avenue of the Americas, New York, N.Y. 10020.

061Y GPDS: General Purpose Display System (F-45) (16mm, 18 minutes, black and white)

A description of the system's basic equipment and several ways in which the equipment is used. Illustrates the system's primitive processes and explores, by the construction of a simple rectangle, the system's process-building capability. In addition, using a double bar-chart display, shows how a user can apply data to various types of formats to obtain immediate feedback. The on-line capability of the system and its flexibility for experimentation and information display are emphasized. (System Development Corporation)

Available from System Development Corporation, 2500 Colorado Avenue, Santa Monica, Ca. 90406.

062 Getting the Facts (11 minutes, 16mm, black and white, 1953)

Demonstrates that people have to be well-informed in order to be able to make intelligent decisions, either in private life or public affairs. Discusses the agencies which exist in the average American community for the purpose of providing citizens with the facts they need. Explores the role of newspapers, radio, television, libraries, and other channels of information. (Encyclopaedia Britannica Educational Films)

Available from Encyclopaedia Britannica Educational Corp., 425 North Michigan Avenue, Chicago, Ill. 60611.

063 Holography (30 minutes, 16mm, color kinescope, 1970)

Scientists at TRW Systems in California demonstrate how holograms are made and display several examples. The film incorporates an evaluative discussion of existing and possible applications for holography, including three-dimensional television and movies, new techniques for microscopic analysis, and new data storage methods. (Interface series, No. 7706)

Available from University of California Extension Media Center, Berkeley, Ca. 94720.

064 Human Communication (filmstrip, 17 frames, color, silent, 1962)

Considers how an idea is communicated from one person to another, how questions clear up communication, some problems in communication, and the "bit" theory of communication.

Available from Wayne State University, Systems Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 48202.

064F IBM 1050 Data Communications System (12 minutes, 16mm, color, 1963)

Illustrates the importance of data communications in modern business operations and portrays the ability of this system to transmit data to and from any location in the country over ordinary communication lines. Also demonstrates the system's capacity to use combinations of cards, paper tape, edge-numbered documents, and hard copy. (Training Films Inc.)

Available from IBM office in your area.

064G IBM 1287 Optical Reader (10 minutes, 16mm, color, 1966)

Introduction to the 1287 optical reader, designed to be linked to the System/360, reading typed and printed text as well as pencil-written digits.

Available from IBM office in your area.

064H The IBM 1404 Printer (8 minutes, 16mm, color, 1962)

Describes functional principles of the 1404 chain printer for the 1401 data processing system.

Available from IBM office in your area.

064I IBM 1410/7010 Operating System (16 minutes, 16mm, color)

Illustrates the advantages inherent in the 1410/7010 operating system. It emphasizes job-to-job processing and the teleprocessing capabilities. (Training Films Inc.)

Available from IBM office in your area.

064J The IBM 1440 Data Processing System (48 minutes, 16mm, black and white, 1962)

Describes the 1440 data processing system and its application to small businesses.

Available from IBM office in your area.

064K IBM 2250 Graphic Applications Demonstration (18 minutes, 16mm, color, 1966)

Accompanied by a written commentary instead of a sound track, the film demonstrates the applicability of the IBM 2250 visual display.

Available from IBM office in your area.

064L The IBM 2260 Display Station....Vital Link in the Telephone System (20 minutes, 16mm, color)

Features the IBM 2260 visual display station in a demonstration of various techniques such as data input, data correction, inquiry, and other applications as used by a telephone company service representative. (Training Films Inc.)

Available from IBM office in your area.

064M IBM 2420 Magnetic Tape Unit (9 minutes, 16mm, color, 1968)

Demonstrates the advantages of the 2420 magnetic tape unit.

Available from IBM office in your area.

064N IBM 2770 Data Communication System (8 minutes, 16mm, color, 1969)

Introduction to the 2770 data communication system. Technical description of possibilities and applications.

Available from IBM office in your area.

064P The IBM 7740 Communication Control System (11 minutes, 16mm, color, 1964)

Describes the functional capabilities of the IBM 7740 communicatcn control system.

Available from IBM office in your area.

064Q IBM Operating Systems....The Changing Environment (19 minutes, 16mm, color, 1968)

Discusses the advantages of Operating Systems/360.

064R IBM System/3 Concept and Design (20 minutes, 16mm, color, 1969)

Demonstration of System/3 possibilities with attention paid to the technical structure.

Available from IBM office in your area.

064S IBM System/3 Demonstration (4 minutes, 16mm, color, 1969)

Introductory film on System/3, demonstrating the main component parts.

Available from IBM office in your area.

064T IBM System/3 Invitation (11 minutes, 16mm, color, 1969)

Humorous treatment of the problems of three different clients and the solutions to those problems via System/3. Short discussion of possibilities of the system.

Available from IBM office in your area.

064U IBM System/360 (17 minutes, 16mm, color)

Concentrates on IBM design objectives and their fulfillment in IBM System/360. Industry uses are cited and product capabilities in the broad sense are emphasized. (Training Films Inc.)

Available from IBM office in your area.

064V IBM System/360 Card Processing Power (10 minutes, 16mm, color, 1964)

Describes the IBM/360-Model 20 central processing unit, the input-output devices available with this system, and how these units can be combined to handle card processing applications. (Training Films Inc.)

Available from IBM office in your area.

064W IBM System/360 Model 20 (10 minutes, 16mm, color, 1964)

Illustrates the possibilities of the smaller versions of the IBM System/360. Several new components are reviewed, such as the IBM 2560 Multi-Function Card Machine. Via examples of consumption administration and stock administration an insight is given into the versatility of this card computer.

Available from IBM office in your area.

065 The IBM Administrative Terminal System (16 minutes, 16mm, color, 1964)

Demonstration of ATS and its capabilities in text editing and program writing. This program extends the capability of a 1440 or 1460 to include applications such as the production of manuals, bills of materials, and programs while the computer is performing tape-to-printer and card-to-tape operations. (IBM)

Available from IBM office in your area.

066 Incentive to Progress (30 minutes, 35mm, color)

Depicts activities and services of the Patent Office. Well organized, the film is recommended for laymen as well as those in various scientific disciplines.

Available from American Patent Law Association, 2001 Jefferson Davis Highway, Suite 203, Arlington, Va. 22202.

067 Information Analysis Center (18 minutes, 16mm, color)

Shows how a special, subject-oriented information center, in this case the Defense Metals Information Center at Battelle Memorial Institute, collects and organizes information in order to provide efficient reference service.

Available from Battelle Memorial Institute, Information Research Center, 505 King Avenue, Columbus, O. 43201.

068 Information Explosion (35 minutes, 16mm, black and white, 1967)

The revolution in human communications has made it possible for any information, verbal or pictorial, to be stored, duplicated, transferred or transformed, distributed, and received over distances unimagined a few decades ago. This film is concerned with how information may be responsibly processed and utilized and how it affects the lives of children. Segments include a press conference, an executive briefing, a medical radio network, and interviews with children on medical communication. (Communication Theory and New Educational Media Series) (U.S. Office of Education, by Ohio State University Motion Picture Department)

Available from New York University Film Library, 26 Washington Place, New York, N.Y. 10003.

069 Information Explosion (29 minutes, 16mm, black and white)

A discussion by Don Swanson (Dean, University of Chicago, Graduate Library School); Herman Fussler (director of the University of Chicago libraries); Duncan MacRae, Jr., (professor, department of political science); with Ranlet Lincoln (assistant to the vice president of the university for public affairs), as moderator, revolving around the impact upon libraries, library services, and scholarship of new approaches to information and the new mechanical devices for handling them. Ways in which academic libraries may have to adjust to accomodate the new materials and the new approaches are explored from the standpoint of the university librarian, the information scientist, and the scholarly user of the library's services. (University of Chicago)

Available from American Library Association, Headquarters Library, 50 East Huron Street, Chicago, Ill. 60611.

069I Information Explosion or What Happened (14 minutes, 16mm, color, 1967)

Leaders from different fields discuss the changing role of communication and its impact on the world. (Dynamic Films, Inc.)

Available from Dynamic Films, Inc., 406 Park Avenue, New York, N.Y. 10022.

070 The Information Machine (11 minutes, 16mm or 35mm, color, 1958)

Compares the human mind and the computer. A sophisticated, amusing account of the development of the electronic computer, beginning with primitive man and ending with machine simulation. (IBM)

Available from IBM Motion Picture Library, Modern Talking Picture Service, 1212 Avenue of the Americas, New York, N.Y. 10036.

071 Information Retrieval (18 minutes, 16mm, color, 1961)

Shows how a typical large company solves its communications problems by adopting modern information retrieval procedures, using IBM data processing systems. Deals with KWIC indexing, research project retrieval, SDI, document retrieval, and skill indexing.

Available from IBM office in your area.

072 Instructional Materials Centers and Audiovisual Library Responsibilities (filmstrip, 57 frames, color, with tape, 20 minutes, 7.5 inches per second, and written script, 1968)

An original in-service presentation at Samuel Gompers School demonstrates how library and audiovisual consultants in a junior high school IMC administer a unified media program that supports curriculum goals.

Available from Madison Public Schools, 545 West Dayton Street, Madison, Wis. 53703.

073 International Science Report (A-04-432, 25 minutes, audiotape)

One of a series of reports which analyze in simple, nontechnical language the latest scientific and technological developments around the world. A Canadian psychiatrist discusses the future influence of computers on day-to-day living. An Australian computer programmer describes the functions of digital computers. Scottish research scientists and computer experts discuss new areas for computer use. The use of computers in medicine in Germany is described.

Available from State University of New York, Educational Recordings Library, Thurlow Terrace, Albany, N.Y. 12201.

074 Introduction to Automatic Data Processing (31 minutes, 16mm, black and white)

Discusses the Automatic Data Processing System (ADPS), explaining its underlying

concept, capabilities, operation, and application as a new management tool. Shows several systems currently in use in government installations. Using animation, analyzes the features, operation, and functional components of ADPS, giving attention to communication networks, input and output devices, and the central processing unit consisting of the internal control section, memory section, and arithmetic and logic section. A simple problem is processed for demonstration purposes. (Order No. TF 11-2552)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

075 Introduction to Digital Computers (24 minutes, 16mm, color, 1969)

"What is a computer?" "How does it work?" These are some of the questions answered in this film, including an animated sequence explaining the five basic functions, i.e., input, control, arithmetic, memory, and output. (AVU4756) (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

076 Introduction to Feedback (12 minutes, 16mm, color, 1960)

Feedback -- the cycle of measuring, evaluating, and correcting -- has become a science and an art. The film shows its importance in our daily life. (IBM)

Available from IBM Motion Picture Library, Modern Talking Picture Service, 1212 Avenue of the Americas, New York, N.Y. 10036.

076F Introduction to System Analysis for Library Personnel (five 35mm filmstrips, five magnetic tape cassettes, workbook, script, and instructions)

Contains nine units of instruction that introduce the subject of system analysis to professional librarians. The first five units combine 35mm filmstrips and recorded sound with workbook exercises. Five magnetic tape cassettes contain the audio portion of the first five units. The last four units are bound together in a single volume as a "paper only" presentation. (System Development Corporation for the U.S. Office of Education, Bureau of Research)

Available from U.S. Office of Education, Research and Program Development Branch, 7th and D Streets, N.W., Washington, D.C. 20202.

077 Is Knowledge Power? (28 minutes, 16mm, black and white)

Hubert Humphrey discusses the problems of information storage and retrieval in a society that is today generating information on an unprecedented scale. Presents a panel of librarians and scientists who elaborate on the problems and possible solutions. (Recorded at the studios of WETA-TV, Washington, D.C.)

Available from Special Libraries Association, 235 Park Avenue, South, New York, N.Y. 10003.

078 Just What is General Semantics? (30 minutes, 16mm, black and white, 1955)

Dr. Irving Lee, professor of public speaking at Northwestern University, discusses the field of general semantics. (WOI-TV) (Talking Sense Series)

Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47401.

079 L6: Bell Telephone Laboratories Low Level Link List Language (48 minutes, 16mm, black and white, 1966, Part 1 -- 16 minutes, Part 2 -- 32 minutes)

The films describe the list-processing, computer programming language L6, developed at Bell Telephone Laboratories(BTL) and produced entirely by programming the BEFLIX language (developed by BTL). L6 contains most of the facilities which underlie such list processors as IPL, LISP, COMIT, and SNOBOL, but it permits the user to get much closer to machine code in order to write faster running programs, to use storage more efficiently, and to build a wider variety of linked data structures. Part 2 contains an example of L6 programming. (Produced and directed by K.C. Knowlton)

Available from Bell Telephone Laboratories, Inc., Film Library, Murray Hill, N.J. 07971.

080 Language and Meaning (30 minutes, 16mm, black and white, 1957)

Explains the role of structure in deriving meaning from language. Discusses the relationship of para-language and kinetics to language and meaning. (National Educational Television, Inc.)

Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47401.

081 Learning About Learning (30 minutes, 16mm, black and white, 1963)

Outlines the work of Howard Kendler of New York University, Tracy Kendler of Barnard College, Kenneth Spence of the State University of Iowa, Harry Harlow of the University of Wisconsin, and B.F. Skinner of Harvard University in exploring the different strategies employed in developing new theoretical concepts about man's ability to learn. Shows how the work of these men has influenced methods of instruction in schools and colleges. (Focus on Behavior Series--No. 5) (National Education Television, Inc.)

Available from State University Film Service, 1400 Washington Avenue, Albany, N.Y. 12203.

082 Library Automation and Mechanization (videotapes, 50 minutes each, black and white, 1969)

Course lectures by Hillis Griffin, assistant director of the library services department, Argonne National Laboratory, Argonne, Illinois. The course consists of thirty 50 minute black and white videotapes of a course offered by the Graduate School of Library Science, University of Illinois. "Library Automation and Mechanization" is an introductory course on the subject for library school master's degree students. No previous knowledge of data processing

or computer programming is assumed. The course was recorded on broadcast quality 2" quadruplex tape. A sample tape is available upon request for free loan, for preview purposes only. The complete set of thirty tapes is sold at a price of $1000 plus new tapes and the cost of reproduction (at least $30 an hour). (University of Illinois, Urbana-Champaign)

Available from Robert C. Boston, Television Services, 1110 West Main Street, Urbana, Ill. 61801.

083 The Living Machine (59 minutes, 16mm, 1963)

Exploring the progress already made in electronic technology, this film demonstrates the "artificial intelligence" of machines. Two eminent researchers, Warren McCulloch and Margaret Mead, express their views on the new frontiers of knowledge and experience that man-made machines will open to man himself. (National Film Board of Canada, 680 Fifth Avenue, New York, N.Y. 10019)

Available in two parts from Sterling Educational Films, 241 East 34th Street, New York, N.Y. 10016.

084 Logic By Machine (29 minutes, 16mm, black and white, 1962)

Serves as an introduction to the subject of electronic computers. The relationship of the symbolic world of mathematics to the real world of objects and events is illustrated. A brief description of the abilities of the computer to calculate, remember, and compare is given. (Computer and the Mind Series) (National Education Television, Inc.)

Available from University of California Extension Media Center, Berkeley, Ca. 94720.

084K Magnetic Tapes (12 minutes, 16mm, color)

Describes how IBM tests magnetic tape products before releasing them for shipment to customers. Relates specifications to the need for quality tape in the data processing installation.

Available from IBM office in your area.

085 Man and Computer....A Perspective (20 minutes, 16mm, color)

A primer on some of the basic elements in data processing, such as input, output, storage, and control. These are explained in detail (both in live action and animation), with examples shown as to just how they work and what function they perform. In addition, the binary system is illustrated and defined in an understandable and graphic manner. (IBM)

Available from IBM Motion Picture Library, Modern Talking Picture Service, 1212 Avenue of the Americas, New York, N.Y. 10036.

086 Management and the Computer (29 minutes, 16mm or videotape and script, black and white, 1966)

Presents a functional introduction to computers and illustrates the value of the computer in managerial work.

(Republic Steel Corporation)

Available from Republic Steel Corporation, Republic Industrial Education Institute, P.O. Box 6778, Cleveland, O. 44101.

086K Management of a Time-Sharing System (xF-24) (14 minutes, 16mm, black and white)

Describes the SDC/ARPA general-purpose time-sharing system operating on the Q-32 computer, with emphasis on techniques used to allocate space and time to the more than 300 users of the system.

Available from System Development Corporation, 2500 Colorado Avenue, Santa Monica, Ca. 90406.

087 Managers and Models (29 minutes, 16mm, black and white, 1962)

Explores the design and simulation capabilities of the modern digital computer. Visits the Marshall Space Flight Center in Huntsville, Alabama, and discusses the importance of mathematical models and computers in the design and testing of the Saturn rocket. Illustrates how a computer is used to select the optimum design for a chemical plant. Follows the mathematical simulation of the sugar refining process at a sugar refinery. (NET--Indiana University)

Available from Associate Instructional Materials, 600 Madison Avenue, New York, N.Y. 10022.

088 Manuscripts (10 minutes, 16mm, color, 1956)

Describes the ancient method for preserving the thoughts of man. Samples of various materials such as parchment and vellum are shown. Explains the ancient systems of copying materials in the "Scriptorium" where a group of individuals copy from the oral readings of a single person. (Milestones in Writing Series) (Classroom Film Distributors, Inc.)

Available from University of California Extension Media Center, Berkeley, Ca. 94720.

089 Mark of Man (13 minutes, 16mm)

Traces history of man's efforts to record information from the marks made on walls of caves, through the development of mechanical printing devices to highspeed recording of computer data by cathode ray tube. Various applicators of output from the SC4020 Computer Recorder. (General Dynamics Corporation)

Available from General Dynamics Corporation, 1 Rockefeller Plaza, New York, N.Y. 10020.

089M MEDLARS (35 minutes, Super 8mm cartridge, color and black and white, 1964)

Explains the medical literature and retrieval system located at the National Library of Medicine. (U.S. Public Health Service)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

090 The MEDLARS Story (24 minutes, 16mm, black and white)

Describes the MEDLARS system and a ma-

chine literature search at the National Library of Medicine.

Available from National Medical Audiovisual Center (Annex), Station X, Atlanta, Ga. 30324.

091 Memory Devices (28 minutes, 16mm, color, 1960)

Basic concepts are explained and related to such memory devices as punched cards, punched tapes, relays, magnetic tape, magnetic drums, ferrite cores and sheets, twistors, capacitor array, barrier grid storage tube, and flying spot storage. This film was produced under the guidance of Bell Laboratory's scientists working on storage devices for machine memories. (Bell Telephone Company)

Available from Western Electric Motion Picture Bureau, Public Relations Division, 195 Broadway, New York, N.Y. 10007 or Local Bell Telephone Co. Business Office.

092 Metals Information Center of Tomorrow (13 minutes, 16mm, color, 1957)

Describes in layman's terms the American Society for Metals -- Case Western Reserve University machine literature searching activities in the field of metallurgy. Shows the potentials for mechanical computing machines in library research. (Produced by Case Western Reserve University)

Available from Center for Documentation and Research, School of Library Science, Case Western Reserve University, Cleveland, O. 44106.

093 Microfilm in Libraries (56 color slides with script and tape)

A description of the possible application of microfilm for books and other documentary materials.

Available from Eastman Kodak Company, Information Films Division, 343 State Street, Rochester, N.Y. 14650.

094 Microfilm Systems for Colleges and Universities (78 color slides with script and tape)

Describes the use of several microfilm applications at institutions of higher learning.

Available from Eastman Kodak Company, Information Films Division, 343 State Street, Rochester, N.Y. 14650.

095 The MIRACODE System (7 minutes, 16mm, color)

A general review of the functional capabilities of a microfilm information storage and retrieval system utilizing binary code as the indexing medium.

Available from Eastman Kodak Company, Information Films Division, 343 State Street, Rochester, N.Y. 14650.

096 The MIRACODE System 810B (40 color slides and written script)

A series of slides with commentary describe a 16mm microfilm system with frame indexing (both direct and key-word). Shows input/output equipment and demonstrates some applications. (Eastman Kodak Company)

Available from Eastman Kodak Company, Information Films Division, 343 State Street, Rochester, N.Y. 14650.

097 Modern Holography (30 minutes, 16mm, black and white, 1967)

The hologram, a type of photograph known for many years, has been brought into new prominence by recent developments in hologram techniques and by the development of the laser. This technically-oriented film demonstrates three-dimensional imagery techniques and the possible application of these techniques, ranging from x-ray microscopy to communication transmission. Experimental results of recent work are presented. Lecturer is E.N. Leith of the University of Michigan. (Educational Communications, State University of New York at Albany)

Available from State University Film Service, 1400 Washington Avenue, Albany, N.Y. 12203.

098 A Moment in History (14 minutes, 16mm, color, 1964)

Illustrates the early use of communication satellites, doing this by highlighting the presentation of honorary U.S. citizenship by President Kennedy to Prime Minister Churchill in April, 1963. The live television transmission was sent via Relay satellite from the White House to England. (HQa-122) (National Aeronautics and Space Administration (NASA))

Available from NASA Goddard Space Flight Center, Photographic Branch Code 253, Greenbelt, Md. 20771.

099 Monsanto's Information Center (145 color slides, 1966)

Part 1 -- 74 slides, tape and written script, Part 2 -- 71 slides, tape and written script. A detailed orientation to Monsanto's Information Center. (Monsanto Company)

Available from Monsanto Company Information Center, 800 North Lindbergh Boulevard, St. Louis, Mo. 63166.

100 More Cards...Less Time (15 minutes, 16mm, color, 1969)

Introduces the 1710 VIP, 1701 VP, 1720 Sorter, and illustrates the operational advantage of the keypunch line. Useful film for keypunch operators, as well as management. (AVU 4818) (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

100N NCR 315 Data Processing System (25 minutes, 16mm, color)

A description of the features and operation of the 315 computer system. (National Cash Register Company)

Available from National Cash Register Co., Audiovisual Services, Marketing Education and Publications, Dayton, O. 45409.

100P The NCR 390 Data Processing System (20 minutes, 16mm, color)

A description of the features and operation of the 390 computer system. (National

Cash Register Company)
Available from National Cash Register Co., Audiovisual Services, Marketing Education and Publications, Dayton, O. 45409.

100Q The NCR 420-1 Optical Character Reader (18 minutes, 16mm, color)
Describes the Optical Reader and its operation, and demonstrates how the 420 functions in an EDP System. (National Cash Register Company)
Available from National Cash Register Co., Audiovisual Services, Marketing Education and Publications, Dayton, O. 45409.

101 A New Generation of a New Kind of Thing -- Input 3 (16 minutes, 16mm, color)
A low-cost optical reader designed for use in decentralized locations where data volumes are low, but important.
Available from Recognition Equipment Incorporated, Corporate Communications, P.O. Box 22307, Dallas, Tex. 75222.

102 A New Generation of a New Kind of Thing -- Input 80 (17 minutes, 16mm, color)
A new-generation optical reading system and its impact on our society. (Recognition Equipment Incorporated)
Available from Recognition Equipment Incorporated, Corporate Communications, P.O. Box 22307, Dallas, Tex. 75222.

102H A New Tool for Profit -- The IBM 1440 (12 minutes, 16mm, color, 1963)
Sets forth the place of the IBM 1440 system in today's business. Demonstrates the system, describes the basic fundamentals of input, processing, storage, and output and points up the fact that the IBM 1440 serves as a management tool. (Training Films Inc.)
Available from IBM office in your area.

102L A New Way to Set Type (10 minutes, 16mm, color, 1966)
Announcement of the IBM Composer and the IBM Magnetic Tape Composer, typesetting machines which are breaking through the limitations of existing techniques of typesetting, producing camera-ready copy in classic and modern letters, in various font sizes.
Available from IBM office in your area.

103 915 Optical Character Reader (11 minutes, 16mm, color)
Use of Control Data's OCR page reader in a variety of applications for translation of ASA-font typewriting into digital terms recorded on magnetic tape. (Control Data Corporation)
Available from Control Data Corporation, 8100 34th Avenue, South, Minneapolis, Minn. 55440.

104 No, But I Saw The Movie (12 minutes, 16mm, color, 1961)
Uses animation and live action to explain the resources of a modern library, tracing the history of recorded communication from cave paintings to modern art and from clay tablets to microfilm. (Southern Illinois University)
Available from Southern Illinois University, Audiovisual Service, Carbondale, Ill. 62901.

105 Now and Forever (14 minutes, 16mm, color, 1964)
With the central theme of the transmission of mankind's heritage and culture, the revolutionary methods of Xerography are explored in comparison to previous methods of information storage and retrieval. Sequences are shown of the microfilming of periodicals and newspapers at University Microfilm's plant and the use of microfilm in making printouts of rare books and manuscripts. (Xerox Corporation)
Available from Xerox Films, 300 North Zeeb Road, Ann Arbor, Mich. 48106.

106 The Now World of the 9400 (25 minutes, 16mm, color, 1968)
Motion picture based on the capabilities of the UNIVAC 9400 System. Various configurations are illustrated, as well as features of the UNIVAC 9400 processing power and speed. (AVU 4816) (Sperry Rand Corporation)
Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

107 Number Fields (17 minutes, 16mm, black and white, 1959)
The concept of sets, closures and number fields are developed and their use in solving problems is shown. (McGraw-Hill)
Available from McGraw-Hill Textfilms, 1121 Avenue of the Americas, New York, N.Y. 10020.

108 Number System and Its Structure (11 minutes, 16mm, color and black and white, 1961)
Reviews the concepts on which any number system is based and introduces the binary system used in computers. Discusses also integers, fractions, negative numbers, commutative, associative and distributive laws, and closure principles. (Coronet Films)
Available from Coronet Films, 65 E. South Water Street, Chicago, Ill. 60601.

108F Of Men and Machines (28 minutes, 16mm, black and white, 1963)
Studies the man-machine relationship by examining the ways in which man handles and processes information, the dynamics of information feedback between man and machines, the human being's behavior in complex man-machine systems, and the redesigning of machines. (National Educational Television, Inc.)
Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47405.

108P The On-Line Story (33 minutes, 16mm, color)
Illustrates the use of telephone lines to link widely separated operations of a company directly to a central computer. Visualizes several applications of the system by visiting user installations. (National Cash Register Co.)

Available from National Cash Register Co., Audiovisual Services, Marketing Education and Publications, Dayton, O. 45409.

109 One Moment Please (12 minutes, 16mm, color)

A variety of customer information problems are solved by microfilm. MIRACODE, Microstrip and Microfiche applications are shown in customer inquiry on billing, catalog lookup, and audit trail. (Eastman Kodak Company)

Available from Eastman Kodak Company, Information Films Division, 343 State Street, Rochester, N.Y. 14650.

110 Operations Research -- How It Works (22 minutes, filmstrip, sound, color)

A step-by-step illustration of Operations Research applied to two specific problems. Nontechnical language describes how a team defines each problem and develops usable data.

Available from Wayne State University, Systems Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 48202.

111 Operations Research -- Scope and Limitations (15 minutes, filmstrip, sound, color)

Shows how Operations Research can be used to analyze the more complex problems that arise in organizations. Outlines areas in which Operations Research has proved most successful, and notes the limitations which must be taken under consideration.

Available from Wayne State University, Systems Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 40202.

112 Operations Research -- What Is It? (18 minutes, filmstrip, sound, color)

Presents a general introduction to Operations Research. Describes its development and presents uses in business and industry. The aims are explained, and the steps by which Operations Research achieves its results are described.

Available from Wayne State University, Systems Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 40202.

113 Paper Blizzard (45 minutes, 16mm, color, 1970)

Part I. An Introduction to Federal Information Resources.

Introduces the array of information sources within the federal government, and identifies the use of these resources with professionalism. Briefly scans the spectrum of services available from the typical information source as well as the range of subject matters to be expected. Also indicates the principal switching centers and entry points for one who is unfamiliar with information resources.

Part IIS. An Introduction to Typical Information Services for User Professionals.

Surveys the range of services that may be expected from a representative information source, ranging from acquisition to abstracting and repackaging. Indicates the services of the Federal Clearinghouse, Science Information Exchange (SIE), and National Referral Center (NRC).

Part IIL. An Introduction to Typical Information Services for Information Professionals.

Reviews the same material as Part IIS from the viewpoint of the librarian/information scientist. Should be particularly helpful when incorporated in library or information science curricula.

Available from Battelle Memorial Institute, The Communications Media Research Group, 505 King Avenue, Columbus, O. 43201.

114 Perception and Communication (32 minutes, 16mm, black and white, 1967)

This film is a series of concrete examples of how human perceptions affect the communication process and the individual's concept of reality. Two major theories of perception -- the cognitive and the transactional -- are introduced, each being illustrated in varying degrees by the following sequences: perception in the preschool child and the blind child, contrasting theories of perception by psychologists James Gibson and Hadley Cantril, perception in relation to training in industry, perception and Peace Corps training, and perception and the Headstart Program. Comments by Kenneth Norberg of Sacramento State College relate these aspects of perception to the classroom. (Ohio State University)

Available from University of Michigan, Audio-Visual Education Center, 416 Fourth Street, Ann Arbor, Mich. 48103.

115 Perception II (30 minutes, 16mm, black and white)

A discussion of generally accepted statements concerning the process of perception.

Available from Wayne State University, Systems Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 48202.

116-123 Philosophy Year Addresses and Responses (each is 120 minutes, videotape, 1968)

A series of presentations by prominent scholars who participated in the International Philosophy Year conference held at the State University College at Brockport, State University of New York (SUNY), 1967-68.

116 V-6806-003 The Philosophy of Practice

Address by Prof. Charles Frankel, Columbia University. Response by Prof. Walter Kaufmann, Princeton University.

117 V-6806-004 The Philosophy of Science

Address: "Issues in the Logic of Reductive Explanations," by Prof. Ernest Nagel, Columbia University. Response by Prof. Richard Schlegel, Michigan State University.

118 V-6806-005 The Philosophy of Ethics

Address by Visiting Prof. Milton

Munitz, State University College at Brockport, SUNY. Response by Anthony Quinton, University Lecturer, Oxford University.

119 V-6806-006 The Philosophy of Mind
Address: "Some Problems About Thinking," by Prof. Gilbert Ryle, Oxford University. Response by Prof. Stuart Hampshire, Princeton University.

120 V-6806-009 The Philosophy of Logic and Language
Address: "Philosophical Progress in Language Theory," by Prof. W.O. Quine, Harvard University. Response by Prof. Max Black, Cornell University.

121 V-6806-012 The Philosophy of Social Science
Address: "Kelsen's Doctrine of the Unity of Law," by Prof. H.L.A. Hart, Oxford University. Response by Prof. R.M. Dworkin, Yale University.

122 V-6806-013 The Philosophy of Communications and the Arts
Address: "Philosophy of Communications and the Arts," by Prof. Richard McKeon, University of Chicago. Response by Dr. Kenneth Burke, Visiting Professor, Harvard University.

123 V-6806-014 The Philosophy of Human Rights
Address: "Reflections on Human Rights," by Prof. Sidney Hook, New York University.

116-123 available from State University of New York, Educational Recordings Library, Thurlow Terrace, Albany, N.Y. 12201.

124-130 Philosophy Year Seminars (format not stated; is assumed to be videotape)

124 V-6812-003 Philosophy of Practice
Guest: Charles Frankel, Prof. of Philosophy, Columbia University. Moderator: Walter Kaufmann, Prof. of Philosophy, Princeton University.

125 V-6812-004 Philosophy of Sciences
Guest: Ernest Nagel, Prof. of Philosophy, Columbia University. Moderator: Richard Schlegel, Prof. of Physics, Michigan State University.

126 V-6812-005 Ethics
Guest: Anthony Quinton, Reader in Philosophy, Oxford University. Moderator: Milton Munitz, Visiting Prof. of Philosophy, State University College at Brockport.

127 V-6812-006 Philosophy of Mind
Guest: Gilbert Ryle, Prof. of Metaphysical Philosophy, Oxford University. Moderator: Stuart Hampshire, Prof. of Philosophy, Princeton University.

128 V-6812-010 Philosophy of Social Science
Guest: R.M. Dworkin, Prof. of Law, Yale University. Moderator: Graham Hughes, Prof. of Law, New York University School of Law.

129 V-6812-011 Philosophy of Communications and the Arts
Guest: Richard McKeon, Prof. of Philosophy and Greek, University of Chicago. Moderator: Kenneth Burke, Visiting Prof. of Philosophy, Harvard University.

130 V-6812-012 Philosophy of Human Rights
Guest: Sidney Hook, Prof. of Philosophy, New York University. Moderator: Prof. Raymond Aron, University of Paris.

124-130 available from State University of New York, Educational Recordings Library, Thurlow Terrace, Albany, N.Y. 12201.

131 Pictographs (10 minutes, 16mm, color, 1956)
The development of man's early efforts at written communication through picture writing and idea signs is discussed. (University of Southern California)
Available from University of Southern California, Division of Cinema, Film Distribution Section, University Park, Los Angeles, Ca. 90007.

132 Postal Source Data System (18 minutes, 16mm, color)
The operational story of the U.S. Post Office system for on-line collection of data. Nationwide coverage of post offices, with transmission of operational data via four tele-concentrators to either of two processing centers. Covers importance of this system to national operations of the Post Office Department. (U.S. Post Office Department)
Available from National Audiovisual Center, National Archives and Records Service, (GSA), Washington, D.C. 20409.

133 The Power of Paper (27 minutes, 16mm, color)
Released by a leading paper manufacturer, the film shows how the development of papermaking contributed toward the communications process, community life, and world history. (P.H. Glatfelter Company)
Available from P.H. Glatfelter Company, Film Library, Department of Creativision, Inc., 295 West Fourth Street, New York, N.Y. 10014.

134 Printing Through the Ages (13 minutes, 16mm, black and white, 1950)
Traces the evolution of printing from its origin to the complex presses of today. Shows early methods of reproducing pictures by means of carved wood blocks and depicts gradual transition from printing of pictures to printing of letters. Included are sequences illustrating Gutenberg's modern type face and improvements in paper on which to print. Suggests the impact of the Industrial Revolution on printing and concludes with scenes of

modern book and newspaper presses in action. (Encyclopaedia Britannica Films)
Available from University of California Extension Media Center, Berkeley, Ca. 94720.

135 Publisher Is Known by the Company He Keeps (25 minutes, 16mm, black and white, 1962)
The publisher, Alfred A. Knopf, took home-movies over the last 30 years of authors whose work his firm published. Included in the amusing and sometimes intimate glimpses are Joseph Hergesheimer, Thomas Mann, George Jean Nathan, Oswald Spengler, H.L. Mencken, Max Beerbohm, Willa Cather, Maurice Baring, Sigred Undset, Walter De la Mare, Rebecca West, Logan Clendening, Kahlil Gibran, Elinor Wylie, Carl Van Vechten, Warwick Deeping, Emma Goldman, Witter Brynner, and Ernest Newman. This film is particularly fascinating to a person who is familiar with the writings of these authors and enjoys a peek at them during their informal moments. (DeRochemont)
Available from CCM Films, Inc., 886 3rd Avenue, New York, N.Y. 10022.

136-149 Programming in FORTRAN IV (420 minutes, kinescopes, black and white)
A computer programming course consisting of fourteen kinescoped lectures by W.T. Mara, Supervisor of Teacher Education, Department of Education, University of California, Davis. Each lecture can be rented separately. The lectures were produced by the Department of Educational Television in cooperation with the Computer Center, University of California, Davis.

136 Lecture 1 (30 minutes)
Introduction to computers. Physical and logical organization of computing systems. FORTRAN as a language and a processor.

137 Lecture 2 (30 minutes)
Elements of the FORTRAN language: constants, variables, operation and grouping symbols, expressions, and arithmetic statements.

138 Lecture 3 (30 minutes)
Writing a FORTRAN program. Input-output statements: READ, WRITE, FORMAT, F-specifications, STOP, END statements.

139 Lecture 4 (30 minutes)
Extending input-output capabilities. E-, I-, X-specifications. Unconditional transfer of control: GO TO n.

140 Lecture 5 (30 minutes)
Flow charting: Symbols and application. Logical operators. Conditional transfer of control: Logical IF statement. Data control cards.

141 Lecture 6 (30 minutes)
Manipulating alphabetic information: H- and A-specifications, printer carriage control.

142 Lecture 7 (30 minutes)
Looping procedures: DO statement.

143 Lecture 8 (30 minutes)
Subscribed variables, one-dimensional arrays. Input-output list loops. FORTRAN name convention. Integer arithmetic.

144 Lecture 9 (30 minutes)
Higher dimensional arrays. Nested DO loops. Use of slash in FORMAT statement.

145 Lecture 10 (30 minutes)
Functions: Library, arithmetic statement, FUNCTION subprogram. RETURN statement.

146 Lecture 11 (30 minutes)
Subprograms: SUBROUTINE. Computed GO TO.

147 Lecture 12 (30 minutes)
Subprogram: EXTERNAL DATA statement. Scale factors.

148 Lecture 13 (30 minutes)
Logical variables and functions. Utilizing tape units. Input-output in internal representation. Subprograms: COMMON statement.

149 Lecture 14 (30 minutes)
Segmenting programs. Arithmetic IF statement. Summary.

136-149 available from University of California Extension Media Center, Berkeley, California 94720.

150 Putting Scientific Information to Work (36 minutes, 16mm)
A presentation of the services and products of the Institute for Scientific Information. The film covers the CURRENT CONTENTS journals, INDEX CHEMICUS, SCIENCE CITATION INDEX, and ASCA, the ISI selective dissemination of information service. Included is an explanation and example of how citation indexing can help retrieve information often not found by conventional subject searching. (Institute for Scientific Information)
Available from Institute for Scientific Information, 325 Chestnut Street, Philadelphia, Pa. 19106.

151 The Question Tree (13 minutes, 16mm, color, 1961)
Traces the ancestry of present technological achievements back to questions asked many centuries ago. Visualizes some present avenues of exploration into basic areas of the unknown, and points up the inter-relationship of seemingly diverse lines of inquiry. Shows how intelligent questioning leads to scientific discovery. Includes sequences on cryogenics and language translation. (IBM)
Available from IBM Motion Picture Library, Modern Talking Picture Service, 1212 Avenue of the Americas, New York, N.Y. 10036.

151B R. Buckminster Fuller -- Prospects for Humanity (30 minutes, 16mm, black and white, 1967)

Presents excerpts from speeches by R. Buckminster Fuller during which Dr. Fuller predicts the unification of mankind as a result of technology derived from space exploration, computer applications and systems analysis. (Spectrum Series) (NET Film Service)

Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47401.

152 Reactive Displays (6 minutes, 16mm, color)

A description of the General Motors Research Laboratory computer which processes pictures instead of digits. Provides designers flexibility in manipulating shapes and forms on a readout screen to determine the best possible dimensions for a part. With an electronic stylus, the designer can input an idea and can alter or modify the profile on demand. The application represents a blending of human skill and judgment with computer precision for product design. (General Motors Corporation)

Available from General Motors Corporation, Public Relations Staff, Film Library, General Motors Building, Detroit, Mich. 47202.

153 Real Time Teletype (19 minutes, 16mm)

Describes the use by Chrysler Corporation of a GE Datanet 30 System as a communications processor in worldwide data communications. The system serves as a message switching center, replacing a tape system. (General Electric Company)

Available from Honeywell Information Systems, Inc., Marketing-Education Department, Mail Drop F-315, 13430 N. Black Canyon Hwy., Phoenix, Ariz. 85029.

154 Relating Sets to Numbers (11 minutes, 16mm, color)

The narrator derives the concept of rational numbers, leading step-by-step to the idea of number. Primitive, ancient, and relatively modern forms of numerals are reviewed. Groundwork is laid for further investigation of numbers and numeration systems. (General Electric Company)

Available from General Electric Educational Films, 60 Washington Avenue, Schenectady, N.Y. 12305.

155-156 Reports to the Pharmacist

A series of videotapes designed to make pharmacists aware of some of the latest developments in their field.

155 V-6809-003 Drug Information (30 minutes, videotape, 1968)

Examines present and projected sources of drug information, stressing the importance of current literature to the participating pharmacists. Provides a description of The Drug Information Center as an example of a modern information storage and retrieval system.

156 V-6809-005 The Poison Control Center (30 minutes, videotape, 1968)

An explanation of the functions of the Poison Control Center as a source of information and treatment along with a discussion of the pharmacist's role in its utilization.

155-156 available from State University of New York, Educational Recordings Library, Thurlow Terrace, Albany, N.Y. 12201.

156P The Reproducer (29 minutes, 16mm, black and white, 1971)

Demonstrates the reproducing, gang-punching, comparing, and mark-sensed punching capabilities of the reproducer. Reviews summary punching and end-printing capabilities. (The Wiley Punched Card Processing Film Series)

Available from John Wiley & Sons, Inc., 605 Third Avenue, New York, N.Y. 10016.

156R Response To The Challenge (18 minutes, 16mm, color)

Story of the design and development of the NCR 400 Electronic Accounting Machine. Film discusses features of the system including external tape programming, magnetic ledger cards and magnetic disc memory. (National Cash Register Co.)

Available from National Cash Register Co., Audiovisual Services, Marketing Education and Publications, Dayton, O. 45409.

157 Right of Privacy (59 minutes, 16mm, black and white, 1968)

Designed as a warning of the dangers inherent in a proposed National Data Center which would store data derived from birth certificates, school records, job applications, security checks, personality inventories, income tax and real estate records, credit investigations, military files, hospital and medical records, etc. Interviews with public officials and Congressmen who stress the need to protect the privacy of individuals and the need to distinguish between fact and opinion. (NET Film Service)

Available from University of California Extension Media Center, Berkeley, Ca. 94720.

158 School Instructional Media Center (filmstrip -- 80 frames, color, with recorded script (33-1/3), 14 minutes, 1967)

Describes the facilities, materials, and personnel that would be needed in an Instructional Media Center located in schools. (Utah State Board of Education)

Available from Instructional Media Division, 1400 University Club Building, 136 East South Temple, Salt Lake City, U. 84111.

159 Selective Dissemination of Information (5 minutes, 16mm)

Describes the operation of the Selective Dissemination of Information system currently in use in the IBM Advanced Systems Development Division at the Mohansic Laboratory. (IBM)

Available from IBM Motion Picture Library, Modern Talking Picture Service, 1212 Avenue of the Americas, New York, N.Y. 10036.

160 Seven Authors in Search of a Reader (21 minutes, 16mm, black and white, 1965)

An avant-garde presentation of the relationship of an author to his public.

The settings often resemble the paintings of Seurat and other impressionists. After the withdrawal of the public and the authors into their separate retreats, books finally become a reality to readers. This film is an award-winning Dutch production. (McGraw-Hill)

Available from Contemporary/McGraw-Hill 1121 Avenue of the Americas, New York, N.Y. 10020.

161 Short-Term Visual Memory (18 minutes, 16mm, black and white, 1961)

Illustrates an experiment in visual perception which was conducted in the Visual and Acoustical Research Department of Bell Laboratories. Doctors E. Averbach and A.S. Coriell, the scientists on the project, demonstrate the existence in the seeing mechanism of a temporary information storage which is used in the handling of visual information. The film provides an opportunity to participate in the experiment by having the viewer test his own visual memory of images flashed on the screen. (New York Telephone Company)

Available from New York Telephone Company Film Library, Sterling Movies, Inc., 43 West 61st Street, New York, N.Y. 10023, or local New York Telephone business offices.

161S The 640-200 Printer (11 minutes, 16mm, color)

A visual description of the hardware features of the fastest printer available in the computer industry. (National Cash Register Co.)

Available from National Cash Register Co., Audiovisual Services, Marketing Education and Publications, Dayton, O. 45409.

162 Solving the Paper Caper (9 minutes, 16mm, color)

Shows how a variety of microfilm techniques can be used to store and retrieve information. (Eastman Kodak Company)

Available from Eastman Kodak Company, Information Films Division, 343 State Street, Rochester, N.Y. 14650.

162R The Sorter (35 minutes, 16mm, black and white, 1971)

Reviews the functional components and operating features of the sorter. Demonstrates numeric sorting and explains the differences between numeric and alphabetic sorting. (The Wiley Punched Card Processing Film Series)

Available from John Wiley & Sons, Inc., 605 Third Avenue, New York, N.Y. 10016.

163 SPIRES/BALLOTS Report, No. 7789 (16 minutes, 16mm, color, 1970)

Describes the problems of information retrieval in a graphically humorous way, and reports on two Stanford University research projects -- SPIRES (Stanford Public Information Retrieval System) and BALLOTS (Bibliographic Automation of Large Libraries using a Time-sharing System). One of the early David B. Jones films, an interesting part of cinema history.

Available from University of California Extension Media Center, 2223 Fulton Avenue, Berkeley, Ca. 94704.

164 Standardization (19 minutes, 16mm, black and white)

Explains the basic concepts and benefits of standards and the standardization process. Sets forth broad principles for an effective approach to standardization problems, whether local or international in scope. (Order No. MN 8084)

Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

165 Story with No End (29 minutes, 16mm, color)

Presents a tour of a modern medical research library. Includes closeups of experiments and illustrates methods and techniques used by research scientists. (Produced for Parke, Davis & Co.)

Available from Parke, Davis & Company, 2800 Plymouth Road, Ann Arbor, Mich.

165Y Systems Analysis for Programmers (35 hours, 12 audio cassettes and workbook)

A course comprised of audio cassettes and a 150 page workbook representing a blend of recorded instructions, individual study, materials, work problems, and fill-in charts. (Advanced Management Research)

Available from AMR International Inc., 280 Park Avenue, New York, N.Y. 10017.

166 Talking Ourselves into Trouble (29 minutes, 16mm, black and white)

Discusses general semantics. Develops the idea that one's language determines the limits of one's world. Illustrates the way in which undifferentiated reactions to words lead to a communications deadlock. (KQED) (Language in Action Series)

Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47041.

167 Technical Information Services for the Atomic Energy Commission (22 minutes, 35mm, color, 1961)

Provides a description of the publications, information services and activities of the U.S. Atomic Energy Commission.

Available from U.S. Atomic Energy Commission, Division of Technical Information Extension, Oak Ridge, Tenn. 37830.

168 Technicians in Our Changing World (14 minutes, 16mm, color, and black and white, 1965)

Explains the impact of recent advances in science and automation. Points out the work of technicians in industry, business, and medicine. Underscores the growing need for competent people and describes the educational and attitudinal requirements. (Stanton Films)

Available from Stanton Films, 7934 Santa Monica Boulevard, Los Angeles, Ca. 90046.

168F Then and Now (12 minutes, 16mm, color, 1961)

An account of the development of ENIAC, the first electronic computer, by J. Presper Eckert and Dr. John W. Mauchly, co-inventors

of the system. Following their account of ENIAC, Mr. Eckert and Dr. Mauchly discuss their interests and activities. (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

169 Thermography (30 minutes, 16mm, color, kinescope, 1970)

Principles and demonstrations of infrared photography which records pictures of the "heat" emitted by all objects; infrared imaging equipment includes real-time camera and color scanner. (Interface series, No. 7715)

Available from University of California Extension Media Center, Berkeley, Ca. 94720.

170 Thinking in Sets (11 minutes, 16mm, color)

Several basic concepts in modern mathematics are established -- characteristic sets, unit sets, infinite sets. Four ways in which sets can be related are then described. Number relations and space relations are shown visually. (General Electric Company)

Available from General Electric Educational Films, 60 Washington Avenue, Schenectady, N.Y. 12305.

171 "Thinking" Machines (19 minutes, 16mm, color, 1960)

How close to thinking do modern machines come? The film explores this question by showing demonstrations of some machine developments and then by comparing and contrasting these with the performance of the human brain. Mathematician Claude E. Shannon of M.I.T. demonstrates his artificial mouse. (Horizons of Science Series) (Educational Testing Service)

Available from University of Michigan, Audio-Visual Education Center, 416 Fourth Street, Ann Arbor, Mich. 48103.

172 This Business of Numbers (20 minutes, 16mm, color)

In animated coverage from caveman to present day, arithmetic is traced in story-telling fashion. Shows man's need of numbers for the purpose of counting, etc., to the use of numbers in modern data processing systems. (AVU 4759) (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

173 This is Marshall McLuhan: The Medium Is the Message (53 minutes, 16mm, color, 1967, Part I--27 minutes, Part II--26 minutes, 1968)

In presenting McLuhan's basic ideas, and reactions toward them, this film alternates between comments by McLuhan himself and a number of persons who agree or disagree with him. Presents exciting visual interpretations and representations of McLuhan's explosive ideas about the manner in which all media of communication shape and alter society, concentrating particularly in this film upon the new electronic media and instruments which are speeding up our lives, processing information and, most fundamentally, shaping our sensibilities. Produced by NBC News. (McGraw-Hill)

Available from State University Film Service, 1400 Washington Avenue, Albany, N.Y. 12203.

174 Time, Tempo, and Money (22 minutes, 16mm, color, 1966)

Introduces the UNIVAC 9000 Series of computers and describes their advances in high-speed memory and integrated circuitry. Shows how 9000 System meets the needs of businesses and industry. The new line of UNIVAC 80-column punched-card equipment is also featured. (AVU 4880) (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

175 Tomorrow (30 minutes, 16mm, black and white)

A film designed to make people think about and discuss the effects of automation on our society. The attitudes of both management and labor are expressed in an impartial atmosphere. A discussion in depth of the ethics involved in the problems of automation and effects on the people involved. (United Church of Christ)

Available from University of California Extension Media Center, 2223 Fulton Street, Berkeley, Ca. 94720.

175Q-175Z The Tutorial Film Series (Each film over 5 minutes, 16mm and Super 8mm cartridge, color)

175Q	Data Communications
175R	Direct Access Storage and Retrieval Methods
175S	Programming Estimation and Scheduling Techniques
175T	Simulation Techniques
175U	Computer Graphics and Display Techniques
175V	On-Line Systems and Programming Techniques
175W	Principles of Information Retrieval
175X	Hardware Evaluation Methods
175Y	Time-Sharing Hardware and Software Structure
175Z	Multi-Programming/Processing Concepts

175Q-175Z available from Computer Methods Corporation, 866 Third Avenue, New York, N.Y. 10022.

176 UNA and the UNIVAC (16 minutes, filmstrip, color, 1960)

A basic interpretation of data processing from punched cards through the "Babbage Analytical Engine" to today's computers. Shows how a computer handles a routine inventory problem. Cites broad uses of computers. (AVU 2103) (Sperry Rand Corporation)

Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

177 Unitized Microfilm Systems (8 minutes, 16mm, color)
Introduces the systems concept in the storage and rapid reproduction of engineering drawings through combining microfilm, data-processing cards, and automatic Xerography. Demonstrates the use of the high-speed Xerox Copyflow 24C continuous printer. (Xerox Corporation)
Available from Xerox Corporation, Audiovisual Services, Xerox Square, Rochester, N.Y. 14603.

178 UNIVAC (28 minutes, 16mm, black and white)
A description of a UNIVAC computer and its component parts. (Sperry Rand Corporation)
Available from Wayne State University, Systems Distribution and Utilization Dept., 5448 Cass Avenue, Detroit, Mich. 48202.

179 Universal Machine (29 minutes, 16mm, black and white, 1962)
Explains that the computer is a "universal machine" because it is capable of doing whatever man is capable of instructing it to do. Comments on the incredible speeds at which the computer works and how decisions from a computer depend on the data and instructions put into the machine. Discusses the problem of a universal "machine language." (Computers and the Mind of Man Series) (National Educational Television, Inc.)
Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47405.

180 Universe of Numbers (29 minutes, 16mm, black and white, 1962)
Provides a history of computer development from Blaise Pascal's calculator in the 17th century to ENIAC, the first electronic calculator. Explains how a computer solves a problem and how computers are programmed. (National Educational Television, Inc.)
Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47405.

181 Visual Communications (180 color slides)
The historical development of the graphic media in the United States is represented by examples from the 18th century through mid-20th century, via means of selected advertisements, cartoons, magazine covers, catalogs, record covers, posters, etc. A color slide survey of American graphic design. (Set No. 717)
Available from Sandak Inc., 4 East 48th Street, New York, N.Y. 10017.

182 Visual Perception (19 minutes, 16mm, color, 1959)
Dr. Hadley Cantril, former chairman of the Psychology Department and researcher at the Perception Demonstration Center, Princeton University, illustrates the effects of some of our assumptions on what we "see."
Available from Columbus and Southern Ohio Electric Company, 215 North Front Street, Columbus, O. 43215.

183 The Vital Link (20 minutes, 16mm, color, 1967)
Shows NASA's worldwide communication system and networks of stations that send commands to spacecraft, determine spacecraft position, and receive scientific data from them. Emphasizes the Apollo Tracking network. (HQa-174) (National Aeronautics and Space Administration)
Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.

184 What is Language? (29 minutes, 16mm, black and white)
Defines language as a series of self-contained systems. Shows that words have different meanings within linguistic systems. Illustrates linguistic sub-systems. ("Language in Action" Series) (National Educational TV, Inc.)
Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47401.

185 What'll It Do for Me? (22 minutes, 16mm, color, 1970)
The question posed in the title of this film is answered by UNIVAC customers. Film stresses capability, versatility and performance of the UNIVAC 9000 Series. (AVU 4869) (Sperry Rand Corporation)
Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

186 Where is the Meaning? (29 minutes, 16mm, black and white, 1956)
Indicates that the meaning of words is formulated in the nervous system of the speaker and listener, not in the words themselves. Discusses conditions for meaningfulness. ("Language in Action" Series) (National Educational TV, Inc.)
Available from Indiana University, Audiovisual Center, Bloomington, Ind. 47401.

186H Why Communication Satellites? (12 minutes, Super 8mm cartridge, color and black and white, 1963)
Points out how communication satellites make it possible to send straight-line radio and television signals around the curve of the earth. Explains that some satellites can bounce signals back to earth, while others can strengthen and then rebroadcast the signals. Discusses future uses of satellites. (Bailey Film Associates)
Available from BFA Educational Media, 2211 Michigan Avenue, Santa Monica, Ca. 90404.

187 Words and Their Meanings -- No. 4 (32 minutes, 16mm, black and white, 1962)
Demonstrates that words in one language do not cover the same areas of meanings as words in another. Scenes from a French class for English speakers show how words are taught in meaningful contexts and how the ranges of meanings of such words are developed by practice of appropriate expressions. (Teaching Films Custodians) (Modern Language Association of America)
Available from State University Film

Service, 1400 Washington Avenue, Albany, N.Y. 12203.

188-190 The World in Twenty Years
A series of audiotapes exploring man's potential scientific progress by 1985, as projected by distinguished scholars and teachers.

188 A-32-002 Mass Communication in 1985 (15 minutes, audiotape, 1965)

189 A-32-003 Banishment of Paper Work (15 minutes, audiotape, 1965)

190 A-32-018 Universal Literacy in the Age of Technology (15 minutes, audiotape, 1965)

188-190 available from State University of New York, Educational Recordings Library, Thurlow Terrace, Albany, N.Y. 12201.

191 The World of Real-Time (15 minutes, 16mm, color, 1969)
SITA, an organization dealing with interline communications for major airlines, KESKO, a shopping chain in Finland, and LOCKHEED, a manufacturer in Georgia, are seen as they utilize the various capabilities of UNIVAC real-time systems. (AVU 5018) (Sperry Rand Corporation)
Available from Sperry Rand Corporation, UNIVAC Division, Film Library, P.O. Box 500, Blue Bell, Pa. 19422.

192 A World to Perceive (29 minutes, 16mm, black and white, 1963)
Demonstrates the role of perception in handling and processing information from the environment and the way in which our personalities affect our perception. Reviews the research of Dr. Herman Witkin of the State University of New York Medical Center, Dr. Eleanor Gibson of Cornell University, and Dr. Richard D. Walk of George Washington University. (Focus on Behavior Series -- No. 2) (National Educational TV, Inc.)

Available from State University Film Service, 1400 Washington Avenue, Albany, N.Y. 12203.

193 You and the Computer (9 minutes, 16mm, color)
Puts the complexity of computers into clear, layman's terms. A combination of live action and animation demonstrates that a trained person, with the aid of a computer, can perform more mental work in an afternoon than he could in a lifetime with paper and pencil. "You and the Computer" focuses on an item that is close to everyone, the issuance of a paycheck. (General Electric Co.)
Available from General Electric Educational Films, 60 Washington Avenue, Schenectady, N.Y. 12305.

194 You Can Tell by the Teller (18 minutes, 16mm, black and white, 1965)
Begins by portraying a pleasing and efficient payment transaction through the eyes of a customer. The desirable procedure is contrasted with an instance of less desirable teller service. The film shows, by inference, the importance of library information service staff contact with patrons. (American Telephone and Telegraph Company)
Available from American Telephone and Telegraph Co., 195 Broadway, New York, N.Y. 10017.

195 Your National Archives (19 minutes, 16mm, color, 1956)
Portrays and explains the function of the U.S. National Archives, including preservation of federal records, historical documents, reference service pertaining to federal documents and photo-reproductions of these documents. (U.S. National Archives)
Available from National Audiovisual Center, National Archives and Records Service (GSA), Washington, D.C. 20409.